NONAQUEOUS ELECTROLYTE SECONDARY BATTERY (2000-021442)
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International Class:

- H01M-010/40

Abstract:
PROBLEM TO BE SOLVED: To improve the high temperature service life characteristic of a secondary battery by using LiMn2O4 of a spineal structure as a positive electrode active material, using a carbon material as a negative electrode, and using an organic solvent containing lithium salt and a vinylen carbonate or oligoethylene oxypolyphosphazene as a nonaqueous electrolyte. SOLUTION: A nonaqueous electrolyte secondary battery is obtained by using a positive electrode using Mn2O4 powder, having a spinel structure as a positive electrode active material, a negative electrode using a carbon material and a nonaqueous electrolyte by dissolving lithium salt of one kind of LiPF6 and LiBF4 in an organic solvent. One kind of a vinylen carbonate and oligoethylene oxypolyphosphazene is also included by 0.1 to 10 wt.% in this electrolyte. A ethylen carbonate, a propylene carbonate, a dimethyl or diethyle carbonate, a methyl ethyle carbonate, 1,2-dimethoxyethane, a methyl propylene carbonate, γ-butyrolactone, methyl propionate and ethyl propionate and the like are desirable as the organic solvent. COPYRIGHT: (C)2000,JPO